

REVIEW ARTICLE

WILEY

Health professionals' views and experiences of discussing weight with children and their families: A systematic review of qualitative research

Shanara Abdin^{1,3}  | Gemma Heath²  | Richard K. Welch³ 

¹Faculty of Health and Applied Sciences, University of the West of England, Bristol, Bristol, UK

²Department of Psychology, University of Wolverhampton, Wolverhampton, UK

³Public Health and Wellbeing, City of Wolverhampton Council, Wolverhampton, UK

Correspondence

Shanara Abdin, University of the West of England, Bristol, Faculty of Health and Applied Sciences, Coldharbour Lane, Bristol, BS16 1QY, UK.
Email: shanara2.abdin@live.uwe.ac.uk

Abstract

Background: Healthcare professionals are ideally placed to discuss weight management with children and families to treat and prevent childhood obesity. The aim of this review was to collect and synthesize primary research evidence relating to health professional's views and experiences of discussing weight with children and their families.

Methods: Systematic searches were conducted using the following databases: MEDLINE (OVID), Cumulative Index to Nursing and Allied Health Literature (CINAHL), EMBASE (OVID), PsycINFO (OVID) and Healthcare Management Information Consortium (HMIC). Twenty-six full text qualitative studies published in English Language journals since inception to October 2019 were included. Papers were quality assessed and synthesized using an inductive thematic analysis approach.

Results: Data analysis generated five themes: sensitivity of the issue, family-professional relationships, whole systems approach, professional competency and sociocultural context.

Conclusion: Supporting behaviour change through discussion of healthy weight with children and families is an important part of the health professional's role. Tailored information for professionals, including resources and training, facilitates them to confidently talk to children and families about weight prioritized within interventions. The success of such interventions requires commitment from a range of professionals to ensure healthy weight is tackled through a whole system approach.

KEYWORDS

children, family health, health professional, obesity, weight

1 | BACKGROUND

Obesity-related illnesses are estimated to cost the UK £4.2 billion each year (Department of Health, 2010) as well as causing significant physical and psychological discomfort and reduced quality of life. Obesity is a complex issue and a major threat to children's health and wellbeing. Children and young people who are affected by overweight

or obesity are more likely to be absent from school and have additional healthcare needs compared to healthy weight peers (Public Health England, 2017). Obesity and overweight are further linked to a range of noncommunicable diseases including asthma, type 2 diabetes, cancer and heart disease (Department of Health, 2010; Public Health England, 2017). Obesity amongst children and young people is associated with poor psychological and emotional health whereby many

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. *Child: Care, Health and Development* published by John Wiley & Sons Ltd.

children with overweight experience bullying or harassment. With nearly a third of children aged 2–15 years affected by overweight or obesity, the problem is rapidly increasing (Health and Social Care Information Centre, 2015).

Supporting individuals to change unhealthy behaviours through the use of brief, opportunistic interventions is advocated as one way of preventing behaviour-related illnesses (Abraham et al., 2009). Healthcare professionals (HCPs) are well placed to talk to children and their families about weight, to address the issue before it progresses. In the United Kingdom, a 'Making every Contact Count' policy mandates that all professionals in the public sector have a responsibility to routinely tackle behavioural causes of ill health, including poor diet and lack of physical activity. This is also recommended within the UK's National Institute for Health and Care Excellence (NICE) guidance on behaviour change (NICE, 2014). Indeed, changing behaviour has great potential to improve child and family health and thus can arguably be considered the responsibility of every paediatric HCP. Nevertheless, evidence has suggested that it does not routinely happen (Elwell et al., 2014). It is important therefore to understand the challenges HCPs face in discussing weight with children and families during contacts with them.

Reviews conducted in the area of child weight management, have to date, focussed on the perspectives and views of parents/caregivers (Bentley et al., 2017; Gillison et al., 2016; Lampe et al., 2020). Research has shown that parents who seek help from professionals relating to their child's weight have received mixed responses (Edmunds, 2005). A systematic review investigating HCPs' views on child weight (Bradbury et al., 2018) identified barriers to raising discussions with parents including professional–parent interactions and organizational issues. However, this review focussed on professionals initiating discussion with parents only. It did not include professionals who raise the issue of weight directly with the child/young person whose weight is being discussed. In this review, we synthesize the qualitative evidence related to health professional's views and experiences of discussing weight with children and their families. Synthesizing qualitative research is recognized as a valuable method for identifying barriers to health promotion policies and practices and informing effective and engaging health interventions (Thomas & Harden, 2008). Rather than aggregating data as in traditional 'narrative' approaches, qualitative reviews aim to further understanding by going 'beyond the content of the original studies' (Thomas & Harden, 2008, p. 3).

2 | AIM

The aim of this paper is to systematically collect and synthesize primary qualitative research evidence relating to health professional's views and experiences of discussing weight with children and their families.

3 | METHOD

3.1 | Eligibility criteria

Studies were eligible for inclusion if they reported qualitative findings from studies exploring HCP's views and experiences of discussing

Key Messages

- Obesity is a complex issue and a major threat to children's health and wellbeing.
- Reviews conducted in the area of child weight management, have to date, focussed on the perspectives and views of parents.
- This study found that supporting behaviour change through discussion of healthy weight with children and families is an important part of the health professional's role.
- The success of such interventions requires commitment from a range of professionals to ensure healthy weight is tackled through a whole system approach.

weight with children and their families. Studies reporting findings from mixed samples including parents/families and health professionals were included if health professionals' views and experiences were reported separately in the data. Studies were not limited by year of publication or country but were limited to English language.

3.2 | Search strategy

A search strategy was developed using terms based on the population (e.g., HCPs), issues (e.g., discuss*), setting (e.g., healthcare) and context (e.g., weight management). The search strategy included a combination of free text and index terms. Synonyms were combined using the word OR and concepts were combined using the word AND (Boolean logic) (Figure 1).

Searches were conducted from inception to 12 October 2019 using databases: MEDLINE (OVID), Cumulative Index to Nursing and Allied Health Literature (CINAHL), EMBASE (OVID), PsycINFO (OVID), and Healthcare Management Information Consortium (HMIC). The reference lists of all included studies, and relevant reviews were searched. Relevant grey literature was searched using Google Scholar; ProQuest Dissertations and Theses database; and Conference Proceedings Citation Indices for Science, and for Social Science and Humanities, available through Web of Science.

4 | DATA COLLECTION

4.1 | Selection of studies

Titles and abstracts identified by the electronic searches were downloaded into an EndNote (Clarivate Analytics, Philadelphia) reference management database and duplicates removed. Remaining articles were then imported into Covidence systematic review software (Melbourne). One of the review authors (SA) screened all remaining citations. Studies that clearly did not meet the inclusion criteria (see Table 1) were excluded, and all other possible relevant citations were retrieved as full text copies for assessment for inclusion in the review.

FIGURE 1 Search strategy

Population	Issues
<i>exp Healthcare Professionals</i> <i>exp Family</i> parent* mother* father* Healthcare <i>Caregivers</i> care-giver guardian family families	Discuss* Communication <i>Experienc*</i> Barriers <i>Perciev*</i>
Setting	Context
hospital* health care services care service? clinic p\$ediatric? <i>adolescent health services</i>	Weight Management Obesity Overweight

Two reviewers (SA and GH) independently assessed the eligibility of retrieved full text papers. Disagreements were resolved by discussion with a third member of the research team (RW). A PRISMA study flow chart was used to summarize papers included and excluded at each stage. Each study excluded at the full paper screening stage was described in the excluded studies table along with the reason for exclusion.

5 | DATA EXTRACTION

Studies were read and re-read before data were extracted and recorded on a pre-prepared form. As well as basic study information, data were extracted from the findings and discussion sections of included papers on key themes, ideas and concepts as expressed in original terms by the participants (first-order constructs) and also by the authors (second-order constructs). Information about study setting, methodology and

participants was extracted to provide a context for data synthesis. Two reviewers (SA and RW) independently obtained and recorded the data. Where the authors were unsure or disagreed, discussions were held with a third member of the research team (GH).

6 | CRITICAL APPRAISAL OF INCLUDED STUDIES

Two reviewers (SA and RW) independently assessed the quality of the included studies using the Critical Appraisal Skills Programme (2014). Studies of all quality were included, but the quality of studies was taken into consideration during data synthesis, so that those studies rated as having a higher quality were given more weight within the analysis. Discrepancies were resolved through discussion with the wider research team.

7 | DATA SYNTHESIS

Data synthesis was carried out using an inductive thematic approach (Thomas & Harden, 2008). Thematic synthesis has three stages: coding of text 'line-by-line', development of 'descriptive themes' and generation of 'analytical themes'. While the development of descriptive themes remains 'close' to the primary studies, the analytical themes represent a stage of interpretation whereby the reviewers 'go beyond' the primary studies and generate new interpretive constructs, explanations or hypotheses. This approach enables a systematic and transparent approach to data analysis and facilitates generation of rich data-driven themes (Thomas & Harden, 2008).

Initial coding was carried out by one reviewer (SA) with a subset of studies coded by two reviewers independently (GH and RW). Codes were then discussed, and a coding frame iteratively developed and

TABLE 1 Inclusion criteria

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> Qualitative studies Studies exploring health professionals' views or experiences of discussing weight management with children and families Studies focussing on healthcare professional views. Studies in any geographical location Studies in English language 	<ul style="list-style-type: none"> Descriptions and evaluations of transition services/interventions Studies with non-qualitative designs Mixed sample studies where healthcare professional data cannot be separated Parent or child's/young people experiences Non-healthcare professional views Not discussing weight management Not published in English language

agreed upon. Differences between codes were resolved through discussion. Findings of the review were reported in line with best practice guidance (Tong et al., 2012). To ensure trustworthiness throughout the process, the authors presented a narrative account of the synthesis and illustrated each theme using quotes taken directly from the included studies. A clear and transparent audit trail detailing a reflexive approach and discussions with the wider team was conducted.

8 | FINDINGS

The initial search generated 1434 records. Twenty six studies met the criteria for inclusion in the review (Figure 2).

9 | STUDY CHARACTERISTICS

The included studies present qualitative data exploring the views and experiences of HCPs discussing weight management with children

and their families. The characteristics of each study are presented in Table 2. Data were collected between 2001 and 2019 from a total of 493 health professionals, including general practitioners (GPs), psychologists, school nurses and dietitians. Eleven studies solely focussed on nurses. Studies were conducted across nine countries (Australia, Canada, Denmark, the Netherlands, New Zealand, Norway, Sweden, UK and USA). Sixteen studies collected data through interviews, five through focus groups, three through interviews and focus groups and two studies were mixed methods where qualitative findings were reported separately to quantitative results.

10 | CRITICAL APPRAISAL

A summary of the critical appraisal results is presented in Table 3. All studies were assessed as having a clear statement of aims and all reported the appropriate qualitative methodology. As a result, findings generally demonstrated sensitivity to context and commitment to rigour. Included studies rarely reported on the relationship between the

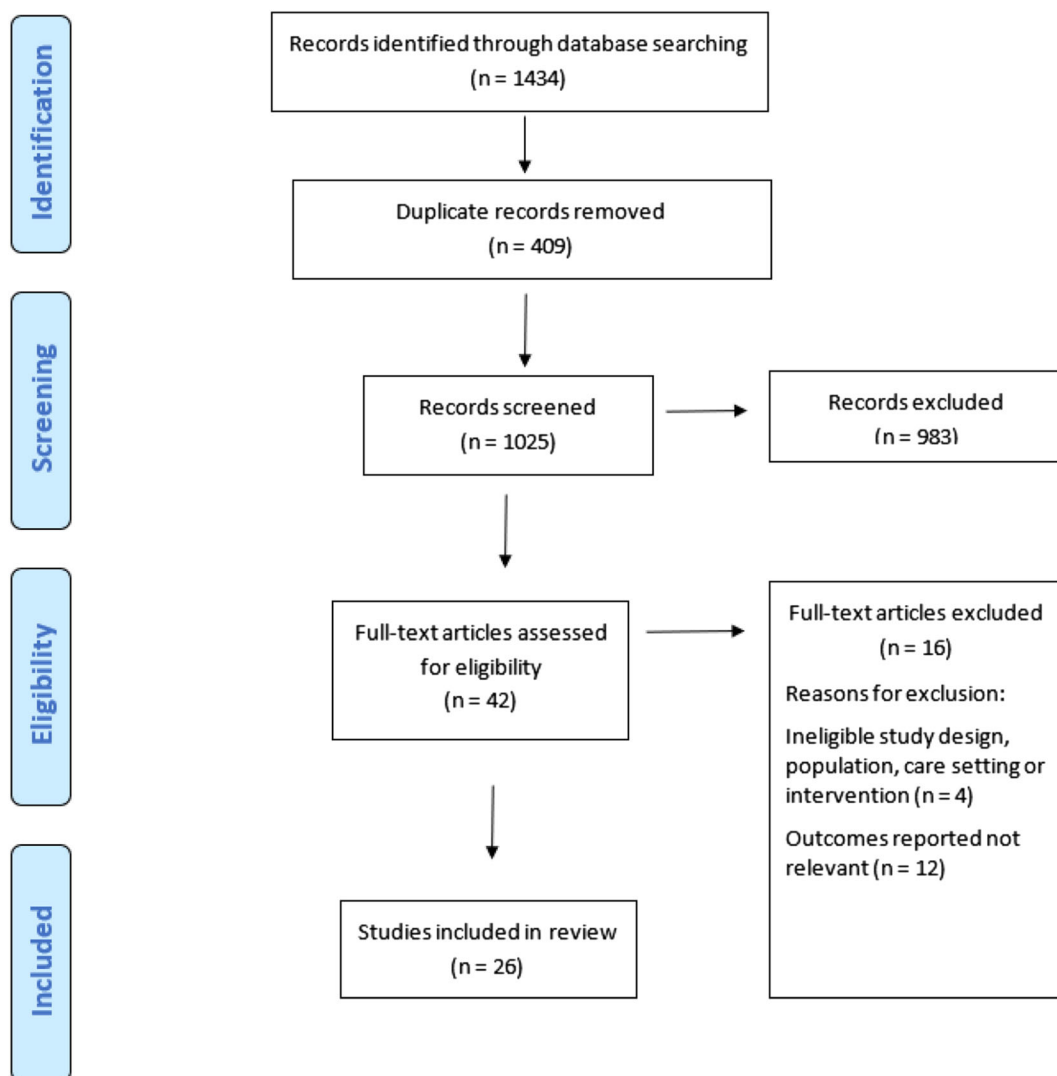


FIGURE 2 Inclusion criteria

TABLE 2 Study characteristics

Study	Country/participants	Data collection methods	Data analysis methods
1. Barlow et al. (2007)	USA/8 paediatricians	Interviews	Deductive analysis
2. Bonde et al. (2014)	Denmark/12 school nurses	Interviews	Content analysis
3. Chamberlain et al. (2002)	USA/19 female health care professionals	Interviews and focus groups	Qualitative synthesis. Analytical method unclear
4. Clarke et al. (2018)	UK/10 HCPs (respiratory consultants, general paediatricians and respiratory nurses)	Interviews	Framework approach
5. Edvardsson et al. (2009)	Australia/10 nurses	Interviews	Content analysis
6. Farnesi et al. (2012)	Canada/12 clinicians (dietician, nurse, paediatrician, psychiatrist and psychologist)	Focus groups	Thematic analysis
7. Findholt et al. (2013)	USA/13 clinicians	Interviews	Focussed coding and grounded theory
8. Gerards et al. (2012)	The Netherlands/16 youth health care professionals	Interviews	Intervention implementation model
9. Gilbert and Fleming (2006)	USA/24 paediatricians	Interviews	Editing analysis
10. Helseth et al. (2017)	Norway/21 school nurses	Focus groups	Content analysis
11. Isma et al. (2012)	Sweden/17 child healthcare nurses	Interviews	Phenomenographic approach
12. Jachyra et al. (2018)	Canada/5 HCPs (paediatricians, nurses and neurologist)	Interviews	IPA approach
13. Johnson et al. (2018)	UK/16 HCPs (general practitioners, school nurses and nursing assistants)	Interviews and focus group	Thematic analysis
14. Jones et al. (2014)	Australia/10 GPs	Interviews	Thematic analysis
15. King et al. (2007)	Australia/26 GPs	Focus groups	Content analysis
16. Ljungkrona-Falk et al. (2013)	Sweden/76 nurses	Mixed methods—focus group and questionnaire	Content analysis
17. McPherson, Swift et al. (2017)	Canada/13 HCPs (nursing and physiotherapists)	Interview	Phenomenological approach
18. Moir and Jones (2019)	New Zealand/33 nurses	Focus groups	Thematic analysis
19. Morrison-Sandberg et al. (2011)	USA/21 school nurses	Interviews	Content analysis
20. Powell et al. (2018)	USA/10 school nurses	Interviews	Content analysis
21. Regber et al. (2013)	Sweden/15 nurses	Interviews	Content analysis
22. Schalkwijk et al. (2016)	The Netherlands/27 GPs and 7 HCPs	Mixed methods—focus groups, interviews and online surveys	Framework analysis
23. Steele et al. (2011)	USA/22 school nurses	Focus groups	Content analysis
24. Thorstensson et al. (2018)	Sweden/6 school nurses	Interviews	Phenomenological approach
25. Turner et al. (2016)	UK/26 school nurses	Interviews and focus groups	Thematic analysis
26. Walker et al. (2007)	UK/18 GPs and nurses	Interviews	Framework analysis

Abbreviations: GPs, general practitioners; HCP, healthcare professional.

researcher and participants, which impacted on transparency of the studies. Given the nature of qualitative research, it is not clear whether researchers worked reflexively during data collection and analysis. All but one study was assessed as reporting a rigorous data analysis process with all studies providing a clear statement of findings.

11 | META-SYNTHESIS RESULTS

Data analysis generated five overarching themes: a sensitive issue, family-professional relationships, whole systems approach, professional competence and sociocultural context.

	Yes	No	Cannot tell
Was there a clear statement of the aims of the research?	100%		
Is a qualitative methodology appropriate?	100%		
Was the research design appropriate to address the aims of the research?	100%		
Was the recruitment strategy appropriate to the aims of the research?	100%		
Were the data collected in a way that addressed the research issue?	100%		
Has the relationship between researcher and participants been adequately considered?	19%	54%	27%
Have ethical issues been taken into consideration?	96%	4%	
Was the data analysis sufficiently rigorous?	92%	8%	
Is there a clear statement of findings?	100%		
How valuable is the research?	100%		

TABLE 3 Critical appraisal of included studies

11.1 | A sensitive issue

Raising the issue of weight was highlighted to be a sensitive matter by health professionals in all studies. Many reported that discussing the child's weight in front of a parent and child risked alienating and offending families. Fear of eliciting a negative response from families was thus evident amongst professionals. Nurses, in particular, demonstrated careful consideration of the language they used in approaching the topic: actively avoiding words such as 'obesity' and 'obese' and instead referring to, for example, clothing sizes as small, medium and large.

There is a fairly fine line between how much you can say to people and putting them off – and then you have lost them completely. (Nurse) (Edvardsson et al., 2009)

Professionals expressed concern that raising weight for discussion (particularly during appointments not related to weight) would negatively impact future attendance at clinical appointments, especially in cases where the discussion was not welcomed. Some professionals reported experiences of parents being offended when the issue of their child's weight was raised, highlighting the impact this could have on parental trust in the professional's agenda.

Should we? [bring up the issue of a child's weight] probably yes but we do not. Usually because the response back is very negative. You do not want to lose their trust in the condition they have come to see you about (GP) (Walker et al., 2007).

In addition, the issue of body mass index (BMI) not being an exact measure was highlighted, particularly in cases where children presented with more developed muscles: 'we don't measure whether this is muscles or fat ... both boys and girls can often be quite solid ... and

we don't take that into account' (Helseth et al., 2017). The appropriateness of using BMI as an indicator of overweight was thus discussed, with some GPs choosing to use growth charts rather than BMI:

If they are on the 50th percentile for their height but the 100th percentile for their weight, most parents realise there is a problem so I tend to do that rather than give a number. (GP) (King et al., 2007)

The use of growth charts was viewed as an essential resource for professionals especially practice nurses when raising the issue. Due to the visible nature of the chart, professionals felt families benefited from seeing the progression the child was making with their weight.

HCPs reported that initiating conversations about weight was difficult for children who were perhaps not yet able to understand the severity or extent of the issue. GPs, for example, reported that raising the subject of weight in front a child could lead to psychological distress, which nurses further suggested could lead to adverse consequences such as disordered eating or damaged self-esteem, especially for adolescents:

It's the body image thing that especially young women have to face, and probably guys too. You do not want to make someone so hyper-concerned that their weight that is pushes them into other types of unhealthy eating habits. (Nurse practitioner) (Findholt et al., 2013)

It was further reported that when parents presented as defensive or angry in response to the topic of weight being addressed, professionals avoided raising the topic again for at least another year. Moreover, the scale of a child's weight impacted on how they raised the issue. For example, it was considered easier to discuss weight with children with overweight than those with obesity. This was

rationalized because children with overweight were considered by some school nurses, for example, as not 'too far gone' (Regber et al., 2013) (in terms of tackling the issue, thus implying that those children with obesity were helpless against their situation). Professionals further emphasized that conversations around weight were particularly difficult to initiate if the health professional was themselves overweight, indicating a sense from professionals of feeling hypocritical and judged by families, 'I personally get the feeling that the parents are thinking how can you be talking about this, you're fat yourself' (Steele et al., 2011).

11.2 | Family-professional relationships

Professionals reported that raising the issue of a child's weight was influenced by the relationship between the professional and the family. Nurses, for example, reported that they had confidence in raising the issue of child weight management, but only when they had known the family for a long time 'if it is someone you haven't seen very often and then it's more tricky' (Edvardsson et al., 2009). Such familiarity offered the opportunity to intervene early when signs of overweight were present, again, suggesting that they felt more comfortable with working to prevent the issue rather than responding to it. Nurses felt gaining respect from families was vital when raising weight for discussion 'I throw the ball back – it's your life how would you like it to be?' (Bonde et al., 2014). Furthermore, health professionals reported that their relationship with the family depended on perceptions of, and respect for the professionals' role. Some health professionals did not raise the subject if they felt it would harm their relationship with the family.

The relationship between professionals and families was affected when parents failed to engage in the discussion and when they did not view their child's weight as problematic: 'parents do not always accept that their child has a weight issue' (Turner et al., 2016). Additionally, professionals reported conflicts between the parent and child, especially when a parent did not perceive the child's weight as an issue, but the child did. It was observed then, that power dynamics between parents and children presented a challenge to HCPs in raising the conversation. Where parents acted as the decision-maker for their child regarding dietary habits and physical activity, HCPs recognized that younger children were less able to make their own decision to support them with a healthy weight.

GPs further suggested that working with adolescents was different from working with children. Interestingly, adolescents tended to raise the discussion with the GPs first, rendering a need for developmentally appropriate conversations with young patients, who can become increasingly body conscious as they transition towards adulthood. In addition, GPs reported that females were more confident in raising the issue of weight during conversations about the contraceptive pill. It was acknowledged that HCPs needed to demonstrate sensitivity to this aspect of age differences of paediatric patients, which as a result, supported their relationship with the patient.

It's easier with adolescents, they are a bit more aware of things and a bit more conscious of things around them and perhaps they understand better. (GP) (King et al., 2007)

11.3 | Whole system approach

Health professionals suggested that tackling child weight should be viewed as a collaborative approach between organizations and professionals rather than the responsibility of one sole profession.

School nurses clearly felt that there was a lack of organizational support, especially when attempting to implement interventions: 'If the [school] principals aren't on board you can forget it, they're going to shut it down' (Steele et al., 2011). They also highlighted that other professionals, such as teachers and sport coaches, could be more supportive of nurses' efforts in raising the discussion. School nurses in particular reported that the burden of responsibility for discussing weight management was a huge issue and that there was not enough support from the multi-disciplinary team. GPs were also aware that a child's weight was not just a medical issue and stemmed from several wider determinants of health, requiring input from a range of professionals.

When children were referred to other services following a discussion about weight, nurses described experiences of dismissive behaviour from professional colleagues, providing examples of when their referrals were not taken seriously. Further to this, health professionals mentioned that they can often feel unsure of where to refer children to due to lack of available support or specialized services. As one GP suggested, 'there is no treatment as such' (Walker et al., 2007).

In all studies, health professionals acknowledged that behaviour change is difficult and that supporting families to manage weight without input from other organizations such as childcare centres, pre-schools, schools and school canteens was challenging. HCPs were clear on their view that tackling childhood obesity required implementation of interventions early in the child's life with family-based support for healthy eating and physical activity. School nurses in particular, reported that they 'work closely with the public health officials' to raise awareness of overweight and obesity and to support behavioural changes.

It's about behaviour change. They need to change their behaviour and that's very hard to do, it's more than just referring children to the physiotherapist for an exercise programme. (Nurse) (Schalkwijk et al., 2016)

11.4 | Professional competence

Despite acknowledging their role in preventing and addressing child overweight, professionals were less clear on their competence and confidence to raise the issue. While GPs, for example, reported that they have an important role to play in tackling the issue, they

expressed that part of their role was to be direct and honest with patients, to 'be more proactive in helping diagnose but then also helping to steer treatment as well' (King et al., 2007).

In some studies, raising the discussion about weight was perceived to be the responsibility of GPs and practice nurses, with one GP stating 'certainly our role is to raise it with parents' (Walker et al., 2007). Further to this, some HCPs felt tackling the issue of child weight management was a responsibility of parents, families and public health officials:

It's a social problem and cultural problem and it's a family problem as well. It's got to be a big public health drive, a campaign to inform people really. (GP) (Walker et al., 2007)

Mixed levels of confidence to address weight issues were reported, with the professional's own self-efficacy playing a role when raising the matter. Professionals disclosed that they worried about making matters worse and felt that they did not have the communicative skills to tackle the issue. Frustrations were further expressed amongst professionals who felt unsure about what to do once they had raised the topic. As a result, the competency of all professionals was questioned, as was the sufficiency of training: 'we're not trained formally, you're not confident in what you are delivering you know' (Turner et al., 2016).

Another barrier to raising the discussion of weight management with children and their families, described in all studies, was a lack of time and capacity. Due to limited appointments, professionals reported that one of the reasons they did not raise the issue was not seeing the child regularly. GPs specifically reported that they did not raise the issue as they knew it 'takes a long time' (Walker et al., 2007).

Professionals also reported lack of clear protocols and resources, including lack of referral processes and places. While professionals could identify the issue and raise it with the family, they felt unsure about how to offer support. School nurses especially felt there were no written protocols relating to childhood obesity; 'there's no clarity on what we should be doing, I do not know about anyone else, but I do not know any clear guidelines' (Turner et al., 2016). Resources such as patient education materials and accessible dietary and physical activity programmes were believed to be needed:

I'm just not sure exactly how to approach [weight management]. Something fun to build my relationship with the child would be helpful. (Nurse) (Steele et al., 2011)

What resources are available in the community for treating paediatric obesity? You're looking at it. We're really the front line and the last line (Physician assistant) (Findholt et al., 2013).

Frustrations were reported by professionals when they felt 'unable to find relevant information to hand to families' (Jones et al., 2014)

making it difficult to continue the conversation as families wanted additional support to which professionals were not able to provide or signpost to.

11.5 | Sociocultural context

HCPs demonstrated awareness that discussions needed to be tailored to the family's sociocultural context. Cultural factors, for example, were seen as an obstacle especially when language barriers between the professional and family were present. Nurses reported that they struggled to raise the discussion with individuals from a different cultural group, particularly if they felt judged by the family for not understanding their cultural backgrounds. HCPs reported that some cultures viewed overweight and obesity as a sign of a healthy child and wealth of the family, and therefore, they did not see this as an issue. One practice nurse reported that parents deliberately wanted their child to be overweight due to influence of older relatives 'there are parents who want their 1–3 year olds to be chubby ... and that's when the parents are satisfied' (Regber et al., 2013). Discussing weight in this context was thus approached with caution, as HCPs worried about being perceived to critique the family's culture. Furthermore, professionals proposed that the norms around obesity were changing more generally, suggesting that an overweight child is now commonly viewed as having a normal weight thus making it more difficult for parents to accept their child's weight as an issue, especially in light of media representations of what is classified as healthy 'you have a media component coming in too saying be more comfortable with yourself and large is okay' (Steele et al., 2011).

Studies reported that it quickly became apparent to HCPs when discussing weight with families, whether it was a priority or not. For example, HCPs reported that many families had other pressing issues such as providing food at the table especially for those with a low income:

Survival mode true survival. Food on the table. They have to eat breakfast and lunch at school or they probably would not have 3 meals a day. (Nurse) (Morrison-Sandberg et al., 2011)

This was particularly prevalent in countries where healthcare was available at a cost and due to parent's inability to pay. Parenting styles were also reported to be a challenge as it was difficult to raise the issue of eating habits with families where portion sizes were inappropriate or food was used as a reward.

It's very hard to tell a mother to stop feeding their child so much ... it's a deeply psychological thing ... yes ... it's sort of love and food. (Nurse) (King et al., 2007)

In a study of children with asthma, HCPs reported that children use food as a way to cope with having asthma 'they get all sad and then some people turn to food' (Clarke et al., 2018). The impact of healthy

eating was reported in all studies with a focus on food being perceived as a reward in some cultures.

12 | DISCUSSION

This review thematically synthesized 26 papers reporting health professionals' views and experiences of discussing weight with children and their families. There was consistency in findings across the studies leading to five themes: a sensitive issue, family-professional relationships, whole systems approach, professional competence and socio-cultural context. Although previous reviews have synthesized evidence in this area (Bradbury et al., 2018; Lampe et al., 2020; McPherson, Hamilton et al., 2017), this review is the first to include discussions with both children and their families, recognizing that the challenges of talking to these groups (children, young people and parents) may be different.

Supporting other reviews, barriers to discussing weight with families, from the perspective of HCPs, related to sensitivity of the topic (Bradbury et al., 2018; Kovacs et al., 2018). However, the findings of this review further add that HCPs fear alienating families when they raise the issue of weight. While professionals reported feeling uncomfortable about such discussions here and elsewhere (Jacyrya et al., 2018), evidence suggests that making use of parental concern for the child's health can be an effective way of supporting attempts to address the issue of overweight (Bradbury et al., 2018). Having said this, it is recommended that these discussions occur without causing distress. In the United Kingdom, The National Child Measurement Programme (NCMP) was developed to monitor national trends in child heights, weights and BMI, leading to parents of children with overweight being informed and offered support to help reduce their child's excess weight (Sallis et al., 2019). But while the NCMP provides excellent monitoring data, providing this feedback by letter has, as yet, had little impact on obesity rates. Significant research has examined feedback from parents regarding the programme, with many parents indicating that it makes them feel judged, distressed and unsupported by professionals (Falconer et al., 2014; Grimmett et al., 2008; Mooney et al., 2010; Syrad et al., 2015).

Moreover, rates of obesity tend to be higher in children with additional needs or disabilities (Rimmer et al., 2011). The present review included research on professionals working with children with asthma and overweight (Clarke et al., 2018) and children living with Spina Bifida and overweight (McPherson, Hamilton et al., 2017), finding consistency in the types of challenges experienced by professionals working with these populations. However, we also recognize that discussing weight with children/families of children with complex and additional healthcare needs was not an explicit objective of this review and should therefore should be explored further in future reviews.

Interventions that have been implemented to promote conversations between health professionals and children and their families have shown evidence of some success in improving the skills and confidence of HCPs (Kracht et al., 2019; Shue et al., 2016). However,

evidence demonstrating the most effective intervention remains unclear (McPherson, Hamilton et al., 2017). It is imperative that professionals feel confident and supported with raising the issue of weight, with such skills embedded within basic training. Similar to the current review, HCPs have previously identified time constraints and lack of resources as factors that determined whether healthy lifestyle conversations took place and they questioned their professional competency in raising the discussion (Barlow, 2007; Elwell et al., 2013). Studies have demonstrated that the professional's own health behaviours were also believed to influence raising the discussion of healthy behaviour change (Elwell et al., 2013; Laws et al., 2008), a finding that is supported by this review whereby HCPs struggled to raise the discussion of obesity if they were overweight themselves. It is clear from the findings of this review that professionals are still not confident in raising the discussion, despite the development of guides to support weight-related conversations (Public Health England, 2017), suggesting a need for more consideration of the complexity of such conversations (e.g., what each professionals stand to lose or gain by having the conversation; ruining relationships and clinic nonattendance).

Moreover, the Foresight Report (Butland et al., 2007) and World Health Organization (Branca et al., 2007) have previously suggested that a whole system approach to tackling obesity and promoting a healthy weight is critical. HCPs in this review highlighted the importance of a 'whole systems approach' in tackling obesity with it being the responsibility of all professionals working with families, in raising the discussion. Programmes that have been designed to tackle childhood obesity, using an integrated, multi-stakeholder, whole system approach, for example, EPODE (together let us prevent childhood obesity) and the Amsterdam Healthy Weight Programme, have shown promising results (Busch et al., 2018; Gregory, 2019; Specchia et al., 2018).

The importance of using behaviour change theories and strategies when developing interventions to prevent or tackle obesity is widely accepted (Martin et al., 2013; Nixon et al., 2012; Summerbell et al., 2005). What this review adds, however, is that communication strategies are also of paramount importance when discussing health-related issues, in particular those as sensitive as weight (Berry, 2007; Edgar & Volkman, 2012). While literature suggests that accurate, clear and honest communication is vital when discussing obesity (Harris et al., 2014), professionals remain unsure of how best to communicate with families about weight, holding concerns about how individuals will respond upon discussing weight issues (Berry, 2007).

Given the huge relevance of behaviour change in tackling obesity (Gillison, 2019), interventions to support health professionals should incorporate a theoretical framework using behavioural change evidence at the root of implementation (Abraham & Michie, 2008). A recent study examined the barriers and enablers to HCPs providing opportunistic behaviour change interventions during routine medical consultations (Keyworth et al., 2019). It was reported that while HCPs understood the importance of opportunistic behaviour change interventions, they felt uncertain about their own capabilities and the time taken to deliver such interventions. Future research is recommended

to make use of theoretical models for implementing behaviour change interventions within consultations.

13 | LIMITATIONS

This review is, to the best of the authors' knowledge, the first in this area where HCPs views and experiences of discussing weight with both children and their families are explored. It synthesizes findings from 26 studies from nine different locations and a range of methodological quality and rigour. The review was limited to academic studies published in English language; therefore, some relevant studies published in other languages may have been missed. It was also limited by having only one reviewer at the title and abstract screening stage. A lack of reported reflexivity within the included studies does also raise some methodological concerns, although a reflexive approach was taken within this review and the findings have remained grounded in the

original data. The inclusion of, and comparability of, studies conducted in different countries suggests that the issues experienced in discussing weight with children and families are transferable across settings and locations. Similarly, while it could be argued that our knowledge of working with people affected by obesity has advanced because some of the first included studies were published (e.g., those from 2002), consistency in the findings indicates the enduring nature of challenges faced by professionals regarding weight-related discussions with children and families and the need for effective intervention strategies.

14 | IMPLICATIONS

The results of this study suggest a number of challenges experienced by HCPs in discussing weight with children and families. Making use of existing policies and frameworks, Table 4 summarizes practical suggestions for supporting health professionals in this aspect of their work.

TABLE 4 Supporting health professionals to initiate discussions about weight with children and families

Taking a whole systems approach
<p>A multi-disciplinary, boundary spanning approach to supporting healthcare professionals should be adopted. This could include the following: Shared care and structured treatment plans (Rhoades et al., 2011). Working collaboratively with a range of multi-disciplinary professionals including GPs, school nurses, dieticians and psychologists to support families (Bush et al., 2018; Gregory, 2019; Specchia et al., 2018). Implementing policies and practices to support and promote healthy weight, food and physical activity that span organizations and sectors (e.g., health, education and planning).</p>
<p>Making use of behaviour change theory and techniques UK NICE guidelines stipulate that behaviour change approaches should be used in the management and tackling of childhood obesity. Examples of behaviour change techniques include the following: Increasing self-efficacy through mastery of skills, vicarious experience, verbal persuasion and emotional states (Bandura, 1997). Goal setting (goals for increasing physical activity levels and changes within diet using the SMART approach [small, measurable, achievable, recorded and timed]). Self-monitoring (working with the child and family with set goals to enhance motivation and monitor progress)</p>
<p>Developing referral pathways Referral pathways should be developed and implemented, enabling professionals to actively support families in changing their behaviour once child weight is identified as problematic. Helpful strategies might include the following: Developing a directory for local resources that can be accessed quickly by professionals at the point that the conversation about weight is raised. Making use of interventions such as social prescribing (referring patients to activities or programmes available within the community to improve their health and wellbeing; Bickerdike et al., 2017; Messiah et al., 2016). Working with local sectors to raise the awareness of such interventions, contributing to normalization of community-based exercise.</p>
<p>Upskilling the workforce Professionals require training and support to feel confident in their own competence to address the issue of paediatric weight management. Training professionals in the fundamentals of cognitive and behavioural strategies would be beneficial. Evidence-based approaches might include the following: UK Framework for talking about weight with children (Public Health England, 2017) Motivational interviewing has been found to be effective in supporting weight loss in children (Barlow et al., 2007; Hettema et al., 2005; Wong & Cheng, 2013).</p>
<p>Providing a consistent message Healthcare professionals need to provide a consistent message to families regarding child weight across services and sectors. Communication on child obesity needs to be accurate, appropriate, clear, honest, accessible and delivered in a sensitive manner (Moorhead et al., 2013). Existing frameworks that could help HCPs provide a consistent message include the following: Knowledge translation casebook designed to support positive weight-related conversations between HCPs, children and their families (Provvidenza et al., 2019). Recent UK documents designed to support HCPs as part of the national Child Measurement Programme (Chadwick et al., 2019). Using digital technology to enhance healthcare through a web of connection between the community and healthcare providers (Siegal et al., 2018).</p>

Abbreviation: GPs, general practitioners, HCPs, healthcare professionals.

15 | CONCLUSION

This qualitative review synthesizes the experiences of health professionals in raising weight for discussion with children and their families. Findings suggest that discussing weight remains a sensitive issue, for which professionals would benefit from further training in communication strategies, enabling them to develop confidence in their competence to raise the issue of child weight management.

CONFLICT OF INTERESTS

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in the supporting information of this article.

ORCID

Shanara Abdin  <https://orcid.org/0000-0002-3886-9508>

Gemma Heath  <https://orcid.org/0000-0002-1569-5576>

Richard K. Welch  <https://orcid.org/0000-0002-0806-8486>

REFERENCES

- Abraham, C., Kelly, M. P., West, R., & Michie, S. (2009). The UK National Institute for health and clinical excellence public health guidance on behaviour change: A brief introduction. *Psychology, Health & Medicine*, 14(1), 1–8. <https://doi.org/10.1080/13548500802537903>
- Abraham, C., & Michie, S. (2008). A taxonomy of behavior change techniques used in interventions. *Health Psychology*, 27(3), 379–387. <https://doi.org/10.1037/0278-6133.27.3.379>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman & Co.
- Barlow, S. E. (2007). Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: Summary report. *Pediatrics*, 120(Supplement 4), S164–S192. <https://doi.org/10.1542/peds.2007-2329C>
- Barlow, S. E., Richert, M., & Baker, E. A. (2007). Putting context in the statistics: paediatricians' experiences discussing obesity during office visits. *Child: Care, Health and Development*, 33(4), 416–423. <https://doi.org/10.1111/j.1365-2214.2006.00716.x>
- Bentley, F., Swift, J. A., Cook, R., & Redsell, S. A. (2017). "I would rather be told than not know"—A qualitative study exploring parental views on identifying the future risk of childhood overweight and obesity during infancy. *BMC Public Health*, 17(1), 684. <https://doi.org/10.1186/s12889-017-4684-y>
- Berry, D. (2007). *Health communication: Theory and practice*. Poland: Open University Press.
- Bickerdike, L., Booth, A., Wilson, P. M., Farley, K., & Wright, K. (2017). Social prescribing: Less rhetoric and more reality. A systematic review of the evidence. *BMJ Open*, 7(4), e013384. <https://doi.org/10.1136/bmjopen-2016-013384>
- Bonde, A. H., Bentsen, P., & Hindhede, A. L. (2014). School nurses' experiences with motivational interviewing for preventing childhood obesity. *The Journal of School Nursing*, 30(6), 448–455. <https://doi.org/10.1177/2F1059840514521240>
- Bradbury, D., Chisholm, A., Watson, P. M., Bundy, C., Bradbury, N., & Birtwistle, S. (2018). Barriers and facilitators to health care professionals discussing child weight with parents: A meta-synthesis of qualitative studies. *British Journal of Health Psychology*, 23(3), 701–722. <https://doi.org/10.1111/bjhp.12312>
- Branca, F., Nikogosian, H., & Lobstein, T. (2007). *The challenge of obesity in the WHO European region and the strategies for response: Summary*. Denmark: World Health Organization.
- Busch, V., van Opdorp, P. A., Broek, J., & Harmsen, I. A. (2018). Bright spots, physical activity investments that work: JUMP-in: Promoting physical activity and healthy nutrition at primary schools in Amsterdam. *British Journal of Sports Medicine*, 52(20), 1299–1301. <https://doi.org/10.1136/bjsports-2017-097713>
- Butland, B., Jebb, S., Kopelman, P., McPherson, K., Thomas, S., Mardell, J., & Parry, V. (2007). *Tackling obesities: Future choices-project report*. London: Department of Innovation, Universities and skills, Government Office for Science.
- Chadwick, P., Clark, J. & Gahagan, A. (2019). *National Child Measurement Programme: Conversation framework*. London: Public Health England.
- Chamberlin, L. A., Sherman, S. N., Jain, A., Powers, S. W., & Whitaker, R. C. (2002). The challenge of preventing and treating obesity in low-income, preschool children: Perceptions of WIC health care professionals. *Archives of Pediatrics & Adolescent Medicine*, 156(7), 662–668. <https://doi.org/10.1001/archpedi.156.7.662>
- Clarke, R., Heath, G., Pattison, H., & Farrow, C. (2018). Weight-management in children living with asthma: A qualitative study of the experiences of paediatric healthcare professionals. *Journal of Asthma*, 56, 1–8. <https://doi.org/10.1080/02770903.2018.1536146>
- Critical Appraisal Skills Programme. (2014) Critical Appraisal Skills Programme (CASP): Making sense of evidence.
- Department of Health. (2010). Healthy lives, healthy people: Our strategy for public health in England. The stationery office.
- Edgar, T., & Volkman, J. E. (2012). Using communication theory for health promotion: Practical guidance on message design and strategy. *Health Promotion Practice*, 13(5), 587–590. <https://doi.org/10.1177/1524839912450879>
- Edmunds, L. D. (2005). Parents' perceptions of health professionals' responses when seeking help for their overweight children. *Family Practice*, 22(3), 287–292. <https://doi.org/10.1093/fampra/cmh729>
- Edvardsson, K., Edvardsson, D., & Hörnsten, Å. (2009). Raising issues about children's overweight—Maternal and child health nurses' experiences. *Journal of Advanced Nursing*, 65(12), 2542–2551. <https://doi.org/10.1093/fampra/cmh729>
- Elwell, L., Povey, R., Grogan, S., Allen, C., & Prestwich, A. (2013). Patients' and practitioners' views on health behaviour change: A qualitative study. *Psychology & Health*, 28(6), 653–674. <https://doi.org/10.1080/08870446.2012.744008>
- Elwell, L., Powell, J., Wordsworth, S., & Cummins, C. (2014). Health professional perspectives on lifestyle behaviour change in the paediatric hospital setting: A qualitative study. *BMC Pediatrics*, 14(1), 71. <https://doi.org/10.1186/1471-2431-14-71>
- Falconer, C. L., Park, M. H., Croker, H., Skow, Á., Black, J., Saxena, S., ... Kinra, S. (2014). The benefits and harms of providing parents with weight feedback as part of the National Child Measurement Programme: A prospective cohort study. *BMC Public Health*, 14(1), 549. <https://doi.org/10.1186/1471-2458-14-549>
- Farnesi, B. C., Newton, A. S., Holt, N. L., Sharma, A. M., & Ball, G. D. (2012). Exploring collaboration between clinicians and parents to optimize pediatric weight management. *Patient Education and Counseling*, 87(1), 10–17. <https://doi.org/10.1016/j.pec.2011.08.011>
- Findholt, N. E., Davis, M. M., & Michael, Y. L. (2013). Perceived barriers, resources, and training needs of rural primary care providers relevant

- to the management of childhood obesity. *The Journal of Rural Health*, 29(s1), s17–s24. <https://doi.org/10.1111/jrh.12006>
- Gerards, S. M., Dagnelie, P. C., Jansen, M. W., De Vries, N. K., & Kremers, S. P. (2012). Barriers to successful recruitment of parents of overweight children for an obesity prevention intervention: A qualitative study among youth health care professionals. *BMC Family Practice*, 13(1), 37. <https://doi.org/10.1186/1471-2296-13-37>
- Gilbert, M. J., & Fleming, M. F. (2006). Pediatricians' approach to obesity prevention counseling with their patients. *WMJ-Madison*, 105(5), 26–28.
- Gillison, F. (2019). *Psychological perspectives on obesity: Addressing policy, practice and research priorities*. Leciester: British Psychological Society.
- Gillison, F. B., Lorenc, A. B., Sleddens, E. F., Williams, S. L., & Atkinson, L. (2016). Can it be harmful for parents to talk to their child about their weight? A meta-analysis. *Preventive Medicine*, 93, 135–146. <https://doi.org/10.1016/j.ypmed.2016.10.010>
- Gregory, J. W. (2019). Prevention of obesity and metabolic syndrome in children. *Frontiers in Endocrinology*, 10, 669. <https://doi.org/10.3389/fendo.2019.00669>
- Grimmett, C., Croker, H., Carnell, S., & Wardle, J. (2008). Telling parents their child's weight status: Psychological impact of a weight-screening program. *Pediatrics*, 122(3), e682–e688. <https://doi.org/10.1542/peds.2007-3526>
- Harris, J. K., Moreland-Russell, S., Tabak, R. G., Ruhr, L. R., & Maier, R. C. (2014). Communication about childhood obesity on twitter. *American Journal of Public Health*, 104(7), e62–e69. <https://doi.org/10.2105/AJPH.2013.301860>
- Health and Social Care Information Centre. (2015) Health Survey for England 2014.
- Helseth, S., Riiser, K., Holmberg Fagerlund, B., Misvær, N., & Glavin, K. (2017). Implementing guidelines for preventing, identifying and treating adolescent overweight and obesity—School nurses' perceptions of the challenges involved. *Journal of Clinical Nursing*, 26(23–24), 4716–4725. <https://doi.org/10.1111/jocn.13823>
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91–111. <https://doi.org/10.1146/annurev.clinpsy.1.102803.143833>
- Isma, G. E., Bramhagen, A. C., Ahlstrom, G., Östman, M., & Dykes, A. K. (2012). Swedish child health care nurses conceptions of overweight in children: A qualitative study. *BMC Family Practice*, 13(1), 57–60. <https://doi.org/10.1186/1471-2296-13-57>
- Jachyra, P., Anagnostou, E., Knibbe, T. J., Petta, C., Cosgrove, S., Chen, L., ... McPherson, A. C. (2018). Weighty conversations: Caregivers', children's, and clinicians' perspectives and experiences of discussing weight-related topics in healthcare consultations. *Autism Research*, 11(11), 1500–1510. <https://doi.org/10.1002/aur.2017>
- Johnson, R. E., Oyeboode, O., Walker, S., Knowles, E., & Robertson, W. (2018). The difficult conversation: A qualitative evaluation of the 'Eat Well Move More' family weight management service. *BMC Research Notes*, 11(1), 325–327. <https://doi.org/10.1186/s13104-018-3428-0>
- Jones, K. M., Dixon, M. E., & Dixon, J. B. (2014). GPs, families and children's perceptions of childhood obesity. *Obesity Research & Clinical Practice*, 8(2), e140–e148. <https://doi.org/10.1016/j.orcp.2013.02.001>
- Keyworth, C., Epton, T., Goldthorpe, J., Calam, R., & Armitage, C. J. (2019). 'It's difficult, I think it's complicated': Health care professionals' barriers and enablers to providing opportunistic behaviour change interventions during routine medical consultations. *British Journal of Health Psychology*, 24(3), 571–592. <https://doi.org/10.1111/bjhp.12368>
- King, L. A., Loss, J. H., Wilkenfeld, R. L., Pagnini, D. L., Booth, M. L., & Booth, S. L. (2007). Australian GPs' perceptions about child and adolescent overweight and obesity the weight of opinion study. *The British Journal of General Practice*, 57(535), 124–129.
- Kovacs, B. E., Gillison, F. B., & Barnett, J. C. (2018). Is children's weight a public health or a private family issue? A qualitative analysis of online discussion about National Child Measurement Programme feedback in England. *BMC Public Health*, 18(1), 1295–1297. <https://doi.org/10.1186/s12889-018-6214-y>
- Kracht, C. L., Sisson, S. B., Walker, D., Kerr, K., Stephens, L., Anderson, A., ... Salvatore, A. L. (2019). Early care and education teacher's role in obesity prevention and healthy development of young American Indian children. *Journal of Transcultural Nursing*, 30(1), 75–85. <https://doi.org/10.1177/2F1043659618786363>
- Lampe, E. W., Abber, S. R., Forman, E. M., & Manasse, S. M. (2020). Guidelines for caregivers and healthcare professionals on speaking to children about overweight and obesity: A systematic review of the gray literature. *Translational Behavioral Medicine*, 10(5), 1144–1154. <https://doi.org/10.1093/tbm/ibaa012>
- Laws, R. A., Kirby, S. E., Davies, G. P. P., Williams, A. M., Jayasinghe, U. W., Amoroso, C. L., & Harris, M. F. (2008). "Should I and Can I?": A mixed methods study of clinician beliefs and attitudes in the management of lifestyle risk factors in primary health care. *BMC Health Services Research*, 8(1), 44. <https://doi.org/10.1186/1472-6963-8-44>
- Ljungkrona-Falk, L., Brekke, H., & Nyholm, M. (2013). Swedish nurses encounter barriers when promoting healthy habits in children. *Health Promotion International*, 29(4), 730–738. <https://doi.org/10.1093/heapro/dat023>
- Martin, J., Chater, A., & Lorencatto, F. (2013). Effective behaviour change techniques in the prevention and management of childhood obesity. *International Journal of Obesity*, 37(10), 1287–1294. <https://doi.org/10.1038/ijo.2013.107>
- McPherson, A. C., Hamilton, J., Kingsnorth, S., Knibbe, T. J., Peters, M., Swift, J. A., ... Ball, G. D. C. (2017). Communicating with children and families about obesity and weight-related topics: A scoping review of best practices. *Obesity Reviews*, 18(2), 164–182. <https://doi.org/10.1111/obr.12485>
- McPherson, A. C., Swift, J. A., Peters, M., Lyons, J., Joy Knibbe, T., Church, P., ... Willem Gorter, J. (2017). Communicating about obesity and weight-related topics with children with a physical disability and their families: Spina bifida as an example. *Disability and Rehabilitation*, 39(8), 791–797. <https://doi.org/10.3109/09638288.2016.1161845>
- Messiah, S. E., Jiang, S., Kardys, J., Hansen, E., Nardi, M., & Forster, L. (2016). Reducing childhood obesity through coordinated care: Development of a park prescription program. *World Journal of Clinical Pediatrics*, 5(3), 234–243. <https://doi.org/10.5409/wjcp.v5.i3.234>
- Moir, C., & Jones, V. (2019). Experience of nurses measuring preschool body mass index for the health target: Raising healthy kids. *Journal of Primary Health Care*, 11(3), 275–282. <https://doi.org/10.1071/HC19022>
- Mooney, A., Statham, J., Boddy, J., & Smith, M. (2010). *The National Child Measurement Programme: Early experiences of routine feedback to parents of children's height and weight*. Institute of Education, London: Champs Public Health Collaborative.
- Moorhead, S. A., Coates, V. E., Gallagher, A. M., Nolan, G., Murphy, K., & Hazlett, D. E. (2013). Obesity communication among patients by health professionals: Findings from the Weight Care Project. *Health*, 2013, 100–109. <https://doi.org/10.4236/health.2013.58A3015>
- Morrison-Sandberg, L. F., Kubik, M. Y., & Johnson, K. E. (2011). Obesity prevention practices of elementary school nurses in Minnesota: Findings from interviews with licensed school nurses. *The Journal of School Nursing*, 27(1), 13–21. <https://doi.org/10.1177/1059840510386380>
- NICE. (2014). *Behaviour change: Individual approaches*. London: National Institute for Health and Care Excellence.
- Nixon, C. A., Moore, H. J., Douthwaite, W., Gibson, E. L., Voge, C., Kreichauf, S., ... ToyBox-study group. (2012). Identifying effective behavioural models and behaviour change strategies underpinning preschool-and school-based obesity prevention interventions aimed at 4–6-year-olds: A systematic review. *Obesity Reviews*, 13, 106–117. <https://doi.org/10.1111/j.1467-789X.2011.00962.x>

- Powell, S. B., Engelke, M. K., & Neil, J. A. (2018). Seizing the moment: Experiences of school nurses caring for students with overweight and obesity. *The Journal of School Nursing*, 34(5), 380–389. <https://doi.org/10.1177/1059840517717318>
- Provvidenza, C. F., Hartman, L. R., & McPherson, A. C. (2019). Fostering positive weight-related conversations between health care professionals, children, and families: Development of a knowledge translation Casebook and evaluation protocol. *Child: Care, Health and Development*, 45(1), 138–145. <https://doi.org/10.1111/cch.12627>
- Public Health England. (2017). *Let's talk about weight*. London: PHE.
- Regber, S., Mårild, S., & Hanse, J. J. (2013). Barriers to and facilitators of nurse-parent interaction intended to promote healthy weight gain and prevent childhood obesity at Swedish child health centers. *BMC Nursing*, 12(1), 27. <https://doi.org/10.1186/1472-6955-12-27>
- Rhoades, D. R., Al-Oballi Kridli, S., & Penprase, B. (2011). Understanding overweight adolescents' beliefs using the theory of planned behaviour. *International Journal of Nursing Practice*, 17(6), 562–570. <https://doi.org/10.1111/j.1440-172X.2011.01971.x>
- Rimmer, J. H., Yamaki, K., Davis, B. M., Wang, E., & Vogel, L. C. (2011). Obesity and overweight prevalence among adolescents with disabilities. *Preventing Chronic Disease*, 8(2), A41–A46.
- Sallis, A., Porter, L., Tan, K., Howard, R., Brown, L., Jones, A., ... Chadborn, T. (2019). Improving child weight management uptake through enhanced National Child Measurement Programme parental feedback letters: A randomised controlled trial. *Preventive Medicine*, 121, 128–135. <https://doi.org/10.1016/j.ypmed.2019.01.023>
- Schalkwijk, A. A., Nijpels, G., Bot, S. D., & Elders, P. J. (2016). Health care providers' perceived barriers to and need for the implementation of a national integrated health care standard on childhood obesity in the Netherlands—A mixed methods approach. *BMC Health Services Research*, 16(1), 83. <https://doi.org/10.1186/s12913-016-1324-7>
- Shue, C. K., Whitt, J. K., Daniel, L., & Shue, C. B. (2016). Promoting conversations between physicians and families about childhood obesity: Evaluation of physician communication training within a clinical practice improvement initiative. *Health Communication*, 31(4), 408–416. <https://doi.org/10.1080/10410236.2014.963785>
- Siegel, R. M., Haemer, M., Kharofa, R. Y., Christison, A. L., Hampl, S. E., Tinajero-Deck, L., ... Robinson, T. N. (2018). Community healthcare and technology to enhance communication in pediatric obesity care. *Childhood Obesity*, 14(7), 453–460. <https://doi.org/10.1089/chi.2017.0339>
- Specchia, M. L., Barbara, A., Campanella, P., Parente, P., Mogini, V., Ricciardi, W., & Mariani, G. (2018). Highly-integrated programs for the prevention of obesity and overweight in children and adolescent: Results from a systematic review and meta-analysis. *Annali dell'Istituto Superiore di Sanita*, 54(4), 332–339. https://doi.org/10.4415/ANN_18_04_10
- Steele, R. G., Wu, Y. P., Jensen, C. D., Pankey, S., Davis, A. M., & Aylward, B. S. (2011). School nurses' perceived barriers to discussing weight with children and their families: A qualitative approach. *Journal of School Health*, 81(3), 128–137. <https://doi.org/10.1111/j.1746-1561.2010.00571.x>
- Summerbell, C. D., Waters, E., Edmunds, L., Kelly, S. A., Brown, T., & Campbell, K. J. (2005). Interventions for preventing obesity in children. *Cochrane Database of Systematic Reviews*, 3, 1465–1858. <https://doi.org/10.1002/14651858.CD001871.pub2>
- Syrad, H., Falconer, C., Cooke, L., Saxena, S., Kessel, A. S., Viner, R., ... Croker, H. (2015). 'Health and happiness is more important than weight': A qualitative investigation of the views of parents receiving written feedback on their child's weight as part of the National Child Measurement Programme. *Journal of Human Nutrition and Dietetics*, 28(1), 47–55. <https://doi.org/10.1111/jhn.12217>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1), 45. <https://doi.org/10.1186/1471-2288-8-45>
- Thorstensson, S., Blomgren, C., Sundler, A. J., & Larsson, M. (2018). To break the weight gain—A qualitative study on the experience of school nurses working with overweight children in elementary school. *Journal of Clinical Nursing*, 27(1–2), e251–e258. <https://doi.org/10.1111/jocn.13924>
- Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology*, 12(1), 181. <https://doi.org/10.1186/1471-2288-12-181>
- Turner, G. L., Owen, S., & Watson, P. M. (2016). Addressing childhood obesity at school entry: Qualitative experiences of school health professionals. *Journal of Child Health Care*, 20(3), 304–313. <https://doi.org/10.1177/1367493515587061>
- Walker, O., Strong, M., Atchinson, R., Saunders, J., & Abbott, J. (2007). A qualitative study of primary care clinicians' views of treating childhood obesity. *BMC Family Practice*, 8(1), 50. <https://doi.org/10.1186/1471-2296-8-50>
- Wong, E. M., & Cheng, M. M. (2013). Effects of motivational interviewing to promote weight loss in obese children. *Journal of Clinical Nursing*, 22(17–18), 2519–2530. <https://doi.org/10.1111/jocn.12098>

How to cite this article: Abdin S, Heath G, Welch RK. Health professionals' views and experiences of discussing weight with children and their families: A systematic review of qualitative research. *Child Care Health Dev*. 2021;1–13. <https://doi.org/10.1111/cch.12854>